



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/565,394	01/23/2006	Masanari Kobayashi	NSUS055263	2050
22919	7590	09/25/2007		
GLOBAL IP COUNSELORS, LLP 1233 20TH STREET, NW, SUITE 700 WASHINGTON, DC 20036-2680			EXAMINER PHAN, HAU VAN	
			ART UNIT	PAPER NUMBER
			3618	
			MAIL DATE	DELIVERY MODE
			09/25/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/565,394	Applicant(s) KOBAYASHI ET AL.	
	Examiner Hau V. Phan	Art Unit 3618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>1/23/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on 1/23/2006 has been entered.

Claim Objections

3. Claims 21-22 are objected to because of the following informalities: The term "optimise" should be changed to – optimize --. Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 21-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 21-22, the term "and/or" render claim in alternative form.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Hamada et al. (5,323,989).

Hamada et al. in figures 1-2, disclose an engine exhaust system for a vehicle, comprising: at least two flexible couplings at both end of flexible joints (20, 22) having elastic characteristics, positioned at two different locations in the exhaust system.

Hamada et al. also disclose an intermediate component (14, 32) positioned between the at least two flexible couplings and having mass and a dynamic damper-is formed by virtue of the elastic characteristics and the mass.

Regarding claim 2, Hamada et al. disclose the flexible couplings, which are selected to optimize the resonant frequency of the dynamic damper.

Regarding claims 3, 11, Hamada et al. disclose the mass of the intermediate component, which is selected to optimize the resonant frequency of the dynamic damper.

Regarding claims 4, 12, Hamada et al. disclose each of the at least two flexible couplings including a spherical joint.

Regarding claims 5, 13, Hamada et al. disclose the engine exhaust system comprising an upstream flexible coupling having a first elastic characteristic, a

Art Unit: 3618

downstream flexible coupling having a second elastic characteristic. The intermediate component positioned between the upstream flexible coupling and the downstream flexible coupling is separated from a body of the vehicle, and a downstream component positioned further downstream of the downstream flexible coupling and is mounted to the body of the vehicle.

Regarding claim 6, Hamada et al. disclose the upstream flexible coupling, which is configured and arranged to be closer to an engine than to a muffler (16). The downstream flexible coupling, which is configured and arranged to be closer to the muffler than to the engine, and the downstream component is configured and positioned between the downstream flexible coupling and the muffler. The downstream component is being configured and mounted to the body of the vehicle.

Regarding claim 7, Hamada et al. disclose one flexible coupling having an elastic characteristic and another flexible coupling having an elastic characteristic. The elastic characteristics being selected such that a resonant frequency of the section formed by the flexible coupling and the intermediate component is lower than 30 Hz.

Regarding claim 8, Hamada et al. disclose the intermediate component having a mass, which is selected such that a resonant frequency of the section formed by the flexible couplings and the intermediate component is lower than 30 Hz.

Regarding claim 9, Hamada et al. disclose at least two flexible couplings having elastic characteristics, positioned at two different locations in the exhaust system; and an intermediate component positioned between the at least two flexible couplings and

having mass so that a dynamic damper is formed by virtue of the elastic characteristics and the mass.

Regarding claim 10, Hamada et al. disclose the elastic characteristics of the flexible couplings that are selected to optimize the resonant frequency of the dynamic damper.

Regarding claim 14, Hamada et al. disclose the elastic characteristics of the flexible couplings that are selected to optimize the resonant frequency of the vibration system formed of the couplings and the intermediate component.

Regarding claim 15, Hamada et al. disclose the mass of the intermediate component, which is selected to optimize the resonant frequency of the vibration system formed of the couplings and the intermediate component.

Regarding claim 16, Hamada et al. disclose each of the upstream flexible coupling and the downstream flexible coupling including a spherical joint.

Regarding claim 17, Hamada et al. disclose an engine exhaust system to be positioned between an engine and a muffler (16) of a vehicle having a body. The system comprises an upstream (30) flexible coupling configured and arranged to be closer to the engine than to the muffler; a downstream (34) flexible coupling configured and arranged to be closer to the muffler than to the engine; an intermediate component (14, 20, 22) configured and arranged to be positioned between the upstream flexible coupling and the downstream flexible coupling. The intermediate component configured and arranged to be separated from the body of the vehicle; and a downstream component configured and arranged to be positioned between the downstream flexible

Art Unit: 3618

coupling and the muffler, the downstream component configured and arranged to be mounted to the body of the vehicle.

Regarding claim 18, Hamada et al. disclose each of the upstream flexible coupling and the downstream flexible coupling including a spherical joint.

Regarding claim 19, Hamada et al. disclose the upstream flexible coupling having a first elastic characteristic and the downstream flexible coupling having a second elastic characteristic. The first and second elastic characteristics being selected such that a resonant frequency of the section formed by the upstream flexible coupling, the downstream flexible coupling, and the intermediate component is lower than 20-30Hz.

Regarding claim 20, Hamada et al. disclose the intermediate component having a mass, which is selected such that a resonant frequency of the section formed by the upstream flexible coupling, the downstream flexible coupling, and the intermediate component is lower than 20-30Hz.

Regarding claim 21, Hamada et al. disclose the mass of the intermediate component and the elastic characteristics of the flexible couplings are selected to optimize the resonant frequency of the dynamic damper.

Regarding claim 22, Hamada et al. disclose the mass of the intermediate component and the elastic characteristics of the flexible couplings are selected to optimize the resonant frequency of the dynamic damper.

Conclusion

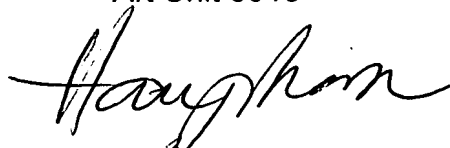
8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Nezan et al. disclose an exhaust volume; Uegane et al. disclose a vibration absorbing for exhaust system; Kromis et al. disclose an exhaust system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hau V. Phan whose telephone number is 571-272-6696. The examiner can normally be reached on 7:30AM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Ellis can be reached on 571-272-6914. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Hau V Phan
Primary Examiner
Art Unit 3618



9/13/07

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Complete If Known	
		Application Number	New-Nat'l phase of PCT/GB2005/002520
		Filing Date	June 28, 2005
		First Named Inventor	Masanari KOBAYASHI et al.
		Group Art Unit	
		Examiner Name	
Sheet 1	of 1	Attorney Docket Number	NS-US055263

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (if known)			
H		US- 5,323,989	06-28-1994	Hamada et al.	
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)				
H		JP-10-196358-A	07-28-1998	Shimoji et al.		Yes
		JP-2000-104543-A	04-11-2000	Oshio et al.		Yes
		JP-2002-371841-A	12-26-2002	Kobayashi		Yes

Examiner Signature	<i>Houghom</i>	Date Considered	9/12/07
--------------------	----------------	-----------------	---------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04.

³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.